

This listing of claims will replace all prior versions and listings of claims in this application:

b.) Listing of Claims

1. (Currently amended) An optical monitoring system, comprising:
 - ~~a signal source for an optical signal having spectrally separated channels~~
having spectral information distributed within a first spectral band and a second spectral band;
 - a tunable filter that filters the optical signal;
 - driver electronics including a ramp generator for applying a ramp drive voltage to the tunable filter to scan transmission peaks of the tunable filter across the first spectral band and the second spectral band;
 - a dichroic filter that separates the first spectral band from the second spectral band in the filtered optical signal from the tunable filter;
 - a first optical signal detector for ~~detecting channels~~ spectral information in the first spectral band in the filtered optical signal; and
 - a second optical signal detector for ~~detecting channels~~ spectral information in the second spectral band in the filtered optical signal.
2. (Currently amended) An optical monitoring system as claimed in claim 1, further comprising an isolator for suppressing back reflections into ~~the~~ a signal source for the optical signal.
3. (Original) An optical monitoring system as claimed in claim 1, further comprising:
 - a reference source for generating a reference signal outside of the first and second spectral bands; and
 - a reference signal detector for detecting the reference signal post filtering by the tunable filter.

4. (Original) An optical monitoring system as claimed in claim 3, wherein the reference source comprises:
 - a broadband source; and
 - an etalon that generates a reference signal with stable spectral characteristics.
5. (Original) An optical monitoring system as claimed in claim 4, wherein the etalon functions as a Fabry-Perot filter to generate a reference signal with spectrally-spaced energy peaks from a broad band signal from the broadband source.
6. (Original) An optical monitoring system as claimed in claim 1, wherein the first and second spectral bands are L and C-communication bands.
7. (Original) An optical monitoring system as claimed in claim 1, wherein a free spectral range of the tunable filter is selected to enable simultaneous detection in the first spectral band and the second spectral band.
8. (Original) An optical monitoring system as claimed in claim 1, wherein a free spectral range of the tunable filter is greater than a range of the first spectral band and the second spectral band individually and less than a range of the first spectral band added to the range of the second spectral band.
9. (Currently amended) A method for optical signal monitoring, comprising:
 - receiving an optical signal having ~~spectrally-separated channels~~ spectral information distributed within a first spectral band and a second spectral band;
 - applying a ramp drive voltage to a tunable filter to scan transmission peaks of the tunable filter across the first spectral band and the second spectral band;
 - filtering the optical signal with the tunable filter;
 - separating the first spectral band from the second spectral band in the filtered optical signal;

detecting channels in the first spectral band in the filtered optical signal; and
detecting channels in the second spectral band in the filtered optical signal.

10. (Currently amended) A method as claimed in claim 9, further comprising suppressing back reflections into ~~the~~ signal source of the optical signal.
11. (Original) A method as claimed in claim 9, further comprising generating the reference signal and filtering the reference signal.
12. (Original) A method as claimed in claim 9, further comprising:
generating a reference signal; and
filtering the reference signal simultaneously with the optical signal.
13. (Original) A method as claimed in claim 9, further comprising simultaneously filtering the first and second spectral bands in the optical signal.
14. (Original) A method as claimed in claim 9, wherein the first and second spectral bands are L and C-communication bands.
15. (Original) A method as claimed in claim 9, further comprising controlling a free spectral range of the tuning step to enable simultaneous detection in the first spectral band and the second spectral band.